

## REMARKS

Further and favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

The specification has been amended to correct typographical errors on pages 7 and 8. Support for these amendments is found on page 7, line 10 of Applicants' specification. Therefore, no new matter has been added.

The rejection of claims 4-6 as being indefinite under 35 U.S.C. § 112, second paragraph is respectfully traversed.

The Examiner takes the position that claims 4-6 are incomplete for omitting essential steps. Specifically, the Examiner asserts that it is unclear as to what measured value of the  $\alpha$ -rays is involved in performing the recited method.

Measured values of  $\alpha$ -ray pulses measured by an  $\alpha$ -ray detector (e.g. a silicon semiconductor detector) include "number", "pulse height" and "time interval of pulses". The "number" indicates a quantity of radiations. The number is divided by the measuring time and further divided by the counting efficiency to provide the radioactivity. (See page 8, line 5 from the bottom to page 9, line 14 of Applicants' specification.) The "pulse height" indicates a magnitude of energy. The energy of radiations is subjected to pulse-height discrimination analysis to provide qualitative determination of radiations. The "time interval of pulses" shows when the pulses enter the  $\alpha$ -ray detector. By statistically analyzing the time differences (time interval analysis), the quantitative and qualitative determination of radioactive nuclides can be improved.

Concerning the time interval analysis recited in claim 4, the principle thereof is described on page 6, line 12 to page 8, line 5 from the bottom of Applicants' specification. The method for separately determining the natural radioactive nuclides having short half-lives such as Rn and the artificial radioactive nuclides having long half-lives such as Pu is described in detail on page 9, line 10 to page 11, line 4 of Applicants' specification.

Applicants' claimed method does not omit any essential steps. As demonstrated by the above discussion, Applicants' claimed method is definite, based on the teachings of the specification. MPEP 2173.02 states that definiteness of a claim language must be analyzed, not in a vacuum, but in light of the specification, the teachings of the prior art,

and the claim interpretation that would be given by one of ordinary skill in the art. For these reasons, the rejection of claims 4-6 under 35 U.S.C. § 112, second paragraph, should be withdrawn.

Therefore, in view of the foregoing amendments and remarks, it is submitted that the ground of rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

Respectfully submitted,

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